

- Acquire Lock to Protect Slots in Task List From Concurrent Multiple Tasks
  - 3: The method of claim 1, wherein
    - Step(c) further include step for a Web interface thread to acquire lock before allocate a slot in task list to prevent other concurrent tasks from allocating same slot.
- Allocate Slot in Task List
  - 4: The method of claim 1, wherein
    - Step (a) further includes the step of providing slot status to determine if a slot is used or not-used.
    - Step (c) further includes the step for Web interface thread to allocate a slot in task list based on if a slot is used or not-used.
- Store the Tasks Information
  - 5: The method of claim 1, wherein
    - Step (a) further includes the step of providing slot in user space task list to store task information for various different tasks such get CPU information, get disk information, transfer data to or from remote systems, get system memory information, etc.
    - Step(c) further includes the step to let Web interface thread get task information from Web browser menu and Web server.
    - Step(c) further includes the step of storing task information into a not-used slot in task list.
- Pass New Task Information
  - 6: The method of claim 1, wherein
    - Step(c) further include the step of let Web interface thread to inform control management thread that a new task has been assigned to a slot in task list.
    - Step(c) further includes the step of Web interface thread exit from running after passing task information to control management thread.
- Task Execution:
  - 7: The method of claim 1, wherein
    - Step (d) further includes the step of let control management thread to get task information from a slot, which previously filled out by Web interface thread.
    - Step (d) further includes the step of executing the task in slot of task list and may let a task run in the background of the control management operation. So that Web browser window will not be blocked during this task run and more tasks can be run parallel with current background task.
- Release Lock:
  - 8: The method of claim 1, wherein

- Step (d) further includes the step of let control management thread to release lock, which acquired by Web interface thread, after the task either finished or run in background of the control management operation. This will allow other threads with other tasks to compete and acquire the lock.
- Application:
- 9: The method and solution described in this invention can be applied to all Web based control monitoring and management system for multiple concurrent tasks support.